

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--|---|------------------|---------|------------------|
| | | (remove adj (particle or impurities or impurity or (particle adj load)) | USPAT | OR | OFF | 2009/05/18 14:16 |
| | | "3231815".pnn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/04 11:58 |
| | | (sensor adj contact\$# adj switch\$2 adj touch adj detect\$2) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:17 |
| L1 | 7 | ("3875481" "4555954" "4562742" "4644801" "4986136" "5150759" "Re32180").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/05/19 13:45 |
| L2 | 31 | "6003305" | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/05/19 13:46 |
| L3 | 1 | "6003305".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/05/19 13:46 |
| L4 | 28 | ("6003305").URPN. | USPAT | OR | OFF | 2009/05/19 13:46 |
| L5 | 0 | ("7527774").URPN. | USPAT | OR | OFF | 2009/05/19 13:47 |
| L6 | 54 | ("20010027165" "20020128151" "20030165414" "20040009106" "20040038819" "20040050618" "20040087439" "20050163677" "3111396" "3968854" "4027367" "4335023" "4414023" "4418790" "4420316" "4671931" "4674447" "4774217" "4813231" "4900712" "4985210" "5100632" "5283041" "5421154" "5422331" "5437152" "5448831" "5612006" "5620672" "5696065" "5721188" "5736690" "5763352" "5829248" | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/05/19 13:47 |

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|----|----|--|---------------------------|----|-----|---------------------|
| | | "5916128" "6003305" "6040266" "6047544" "6068082" "6074973" "6098745" "6109026" "6250422" "6287527" "6319484" "6394225" "6604604" "6622482" "6770252" "6773479" "6773481" "6810660" "6821491").PN. | | | | |
| L7 | 2 | "3231815".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/05/19 13:48 |
| L8 | 1 | "5447076".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/05/19 13:49 |
| L9 | 7 | ("3875481" "4555954" "4562742" "4644801" "4986136" "5150759" "Re32180").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/05/19 13:49 |
| S1 | 50 | (US-20080034839-\$ or US- 20030067244-\$ or US- 20040233458-\$ or US- 20080024119-\$ or US- 20080159433-\$ or US- 20020011266-\$ or US- 20040031776-\$).did. or (US-4206761-\$ or US- 4348673-\$ or US-4660568- \$ or US-5663642-\$ or US- 5889901-\$ or US-6046560- \$ or US-6532834-\$ or US- 6597085-\$ or US-7330271- \$ or US-7373272-\$ or US- 6305231-\$ or US-6474354- \$ or US-3570514-\$ or US- 3617622-\$ or US-3750052- \$ or US-3801871-\$ or US- 3838364-\$ or US-3838814- \$ or US-3882718-\$ or US- 4026505-\$ or US-4035747- \$ or US-4061970-\$ or US- 4072912-\$ or US-4098128- \$ or US-4128737-\$ or US- 4144747-\$).did. or (US- 4198609-\$ or US-4268979- \$ or US-4372164-\$ or US- 4378535-\$ or US-4624129- \$ or US-4799035-\$ or US- 4967169-\$ or US-4988957- \$ or US-5185793-\$ or US- RE34187-\$ or US-5373259- \$ or US-5500597-\$ or US- 5532647-\$ or US-5542118- \$ or US-5587690-\$ or US- 5661269-\$ or US-5757177- \$).did. | US-PGPUB; USPAT | OR | ON | 2008/12/02 09:11 |

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|----|----|---|--------------------|----|----|---------------------|
| S2 | 49 | (US-4515292-\$ or US-5357197-\$ or US-5852229-\$ or US-4392229-\$ or US-4404860-\$ or US-4607254-\$ or US-4878019-\$ or US-4992656-\$ or US-5056355-\$ or US-5238729-\$ or US-5334932-\$ or US-5387462-\$ or US-5424649-\$ or US-5444367-\$ or US-5463449-\$ or US-5485083-\$ or US-5488203-\$ or US-5495137-\$ or US-5497050-\$ or US-5528138-\$ or US-5532802-\$ or US-5663642-\$ or US-5754055-\$ or US-5764538-\$ or US-5767685-\$ or US-5811664-\$).did. or (US-5853994-\$ or US-5856681-\$ or US-5892144-\$ or US-5910700-\$ or US-6004494-\$ or US-6055052-\$ or US-6090638-\$ or US-6100805-\$ or US-6184052-\$ or US-6208255-\$ or US-6213681-\$ or US-6237397-\$ or US-6323772-\$ or US-6328033-\$ or US-6346888-\$ or US-6408679-\$ or US-6457346-\$ or US-6459995-\$ or US-6463785-\$ or US-6465749-\$ or US-6467331-\$ or US-6819120-\$ or US-6832507-\$).did. | USPAT | OR | ON | 2008/12/02 09:12 |
| S6 | 50 | (US-20080034839-\$ or US-20030067244-\$ or US-20040233458-\$ or US-20080024119-\$ or US-20080159433-\$ or US-20020011266-\$ or US-20040031776-\$).did. or (US-4206761-\$ or US-4348673-\$ or US-4660568-\$ or US-5663642-\$ or US-5889901-\$ or US-6046560-\$ or US-6532834-\$ or US-6597085-\$ or US-7330271-\$ or US-7373272-\$ or US-6305231-\$ or US-6474354-\$ or US-3570514-\$ or US-3617622-\$ or US-3750052-\$ or US-3801871-\$ or US-3838364-\$ or US-3838814-\$ or US-3882718-\$ or US-4026505-\$ or US-4035747-\$ or US-4061970-\$ or US-4072912-\$ or US-4098128- | US-PGPUB; USPAT | OR | ON | 2008/12/02 09:58 |

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|-----|----|--|---|----|----|---------------------|
| | | \$ or US-4128737-\$ or US-4144747-\$).did. or (US-4198609-\$ or US-4268979-\$ or US-4372164-\$ or US-4378535-\$ or US-4624129-\$ or US-4799035-\$ or US-4967169-\$ or US-4988957-\$ or US-5185793-\$ or US-RE34187-\$ or US-5373259-\$ or US-5500597-\$ or US-5532647-\$ or US-5542118-\$ or US-5587690-\$ or US-5661269-\$ or US-5757177-\$).did. | | | | |
| S7 | 24 | S6 and sensor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 09:58 |
| S9 | 6 | S7 and stream | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:01 |
| S10 | 0 | S7 and (electromagnetic adj circuit) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:02 |
| S11 | 8 | S7 and electromagnetic | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:02 |
| S12 | 8 | S11 and frequency | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:03 |
| S13 | 6 | S12 and voltage | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:03 |

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|-----|-----|---|---|----|----|---------------------|
| S15 | 2 | S13 and stream | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:03 |
| S16 | 0 | S13 and S4 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:06 |
| S17 | 0 | (sensor adj contact\$3 adj switch\$2 adj touch adj detect\$2) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:17 |
| S19 | 124 | 324/675.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:20 |
| S20 | 28 | S19 and sensor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:20 |
| S21 | 4 | S20 and particle | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:21 |
| S22 | 0 | S21 and electromagnetic | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:21 |
| S23 | 7 | S20 and electromagnetic | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:21 |
| S24 | 3 | S23 and resonant | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:22 |

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|-----|---|--------------------------|---|----|----|---------------------|
| S26 | 3 | S24 and frequenc\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:22 |
| S27 | 3 | S26 and voltage | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:23 |
| S28 | 2 | S26 and load | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:23 |
| S29 | 2 | "6465749".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:48 |
| S30 | 2 | S29 and sensor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:48 |
| S31 | 2 | S29 and electromagnet\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:48 |
| S32 | 2 | S31 and sensor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:49 |
| S33 | 0 | S32 and capacit\$4 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:49 |
| S34 | 2 | S32 and frequenc\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:50 |

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|-----|----|--|---|----|----|---------------------|
| S35 | 1 | S34 and resonant | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 10:50 |
| S36 | 0 | ("6465749").URPN. | USPAT | OR | ON | 2008/12/02 11:31 |
| S37 | 0 | ("6465749").URPN. | USPAT | OR | ON | 2008/12/02 11:31 |
| S38 | 24 | ("3566678" "3583209" "3744297" "3926271" "4158395" "4391338" "4568520" "4696181" "4836314" "4838371" "4937005" "5110747" "5196170" "5261274" "5349844" "5402670" "5488203" "5528933" "5684276" "5717147" "5769539" "5970781" "6164140").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:31 |
| S39 | 10 | ("4187721" "4769882" "4777833" "5131280" "5321991" "5488870" "5501106" "5531126" "5700957" "5708320"). PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:32 |
| S40 | 6 | ("5049776" "5166571" "5216315" "5396144" "5400269" "5451828"). PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:32 |
| S41 | 9 | ("3354413" "4538461" "4785215" "5020370" "5049776" "5166571" "5331242" "5367217"). PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:33 |
| S42 | 15 | ("3566166" "4037121" "4215570" "4372173" "4415827" "4469979" "4531073" "4654663" "4757228" "4764244" "4785215" "4901586" "4912990" "4929860" "5020370").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:33 |
| S43 | 5 | ("3268789" "4215570" "4479385" "4594898"). PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:34 |
| S44 | 10 | ("3190129" "3470400" "3529470" "4071838" "4215570" "4372173" "4446394").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:35 |

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| S45 | 8 | ("3470400" "3479536" "3513356" "4215570" "4321500").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:35 |
| S46 | 7 | ("3470400" "3479536" "3480809" "4215570").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:36 |
| S47 | 2 | ("3238789").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/12/02 11:36 |
| S50 | 4 | "3231815".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 14:25 |
| S51 | 1 | S50 and load | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 14:26 |
| S52 | 0 | S51 and electromagnet\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 14:27 |
| S53 | 0 | S51 and amplitude | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/02 14:28 |
| S54 | 2 | "6465749".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 09:33 |
| S55 | 2 | S54 and electromagnet\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 09:33 |
| S56 | 2 | S55 and sensor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 09:33 |

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|-----|---------|---------------------------------------|---|----|----|---------------------|
| S57 | 2 | S56 and frequenc\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 09:33 |
| S58 | 0 | "84003147".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:10 |
| S59 | 8947145 | WO "84003147" A1 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:11 |
| S60 | 1 | WO91/20065.PTPN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:24 |
| S61 | 0 | WO03/006976.PTPN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:31 |
| S62 | 342104 | heat and sensor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:46 |
| S63 | 63689 | S62 and (temperature and particle) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:47 |
| S64 | 41282 | S63 and (remove impurities) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:48 |
| S65 | 0 | S64 and 324/675.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:48 |

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| S68 | 12580 | heat\$3 adj sensor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:50 |
| S69 | 5224 | S68 and remov\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:51 |
| S70 | 41 | S69 and (ignition adj temperature) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 11:52 |
| S71 | 4 | "3231815".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/03 16:09 |
| S72 | 4 | "3231815".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/12/04 11:58 |
| S73 | 2 | "20080190173" | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/05/18 14:06 |
| S74 | 0 | ("2008/0190173").URPN. | USPAT | OR | OFF | 2009/05/18 14:07 |
| S75 | 7229 | heat\$3 near sensor | USPAT | OR | OFF | 2009/05/18 14:07 |
| S76 | 2320451 | heat\$3 near\$2 sensor | USPAT | OR | OFF | 2009/05/18 14:15 |
| S77 | 11379 | (remove adj (particle or impurities or impurity or (particle adj load))) | USPAT | OR | OFF | 2009/05/18 14:16 |
| S78 | 9646 | S76 and S77 | USPAT | OR | OFF | 2009/05/18 14:16 |
| S79 | 12 | soot same particle same (exhaust adj gas adj stream) same engine | USPAT | OR | OFF | 2009/05/18 14:17 |
| S80 | 0 | S78 and S79 | USPAT | OR | OFF | 2009/05/18 14:18 |

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|-----|---------|--|---|----|-----|---------------------|
| S81 | 1 | "6003305".pn. | USPAT | OR | OFF | 2009/05/18 14:37 |
| S82 | 1535729 | heat\$3 sensor same remove particle | USPAT | OR | OFF | 2009/05/18 14:56 |
| S83 | 0 | "324"/\$.ccls. | USPAT | OR | OFF | 2009/05/18 14:57 |
| S84 | 77376 | "324"/\$.ccls. | USPAT | OR | OFF | 2009/05/18 14:57 |
| S85 | 12707 | S82 and S84 | USPAT | OR | OFF | 2009/05/18 14:57 |
| S86 | 103714 | S85 and engine and temperature ignition | USPAT | OR | OFF | 2009/05/18 14:58 |
| S87 | 1 | "3231815".pn. | USPAT | OR | OFF | 2009/05/18 14:59 |
| S88 | 11 | ("3231815").URPN. | USPAT | OR | OFF | 2009/05/18 14:59 |
| S89 | 44 | capact\$4 adj sensor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/05/19 10:37 |
| S90 | 2 | "5447076".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/05/19 10:38 |

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